A CLEANER, MORE EFFICIENT POWER SECTOR IN MICHIGAN

We have a moral obligation to leave our children a planet that's not polluted or damaged, and by taking an all-of-the-above approach to develop homegrown energy and steady, responsible steps to cut carbon pollution, we can protect our kids' health and begin to slow the effects of climate change so we leave a cleaner, more stable environment for future generations.

We already set limits for arsenic, mercury and lead, but we let power plants release as much carbon pollution as they want. Yet, the effects of climate change are already being felt across the nation. In the past three decades, the percentage of Americans with asthma has more than doubled, and climate change is putting those Americans at greater risk of landing in the hospital. Droughts are becoming more frequent and more severe in the West. And extreme weather, from hurricanes to heat waves, is hitting communities across the country. Now is the time to act. We have already made progress by moving to cleaner sources of energy and improving the energy efficiency of our cars, trucks and buildings. Now, EPA is setting carbon standards for power plants to protect public health and welfare.

Improving the Health of Michigan Residents

We know climate change will put vulnerable populations at greater risk – including the elderly, our kids, and people already suffering from burdensome allergies, asthma, and other illnesses. According to the most recent estimates from the Centers for Disease Control and Prevention, 10.5 percent of Michigan's adult population and 10 percent of children in the state suffer from asthma. The sooner we act, including by taking responsible steps to cut carbon pollution from existing power plants, the more we can do to prevent impacts to this already-vulnerable group.

In 2012, 66 million metric tons of carbon pollution were emitted from power plants in Michigan — equal to the yearly pollution from over 13.5 million cars. In addition to reducing a portion of this carbon pollution, EPA's guidelines will also cut other forms of air pollution like soot and smog. In the first year of the program alone, these reductions will provide important health protections nationally, including preventing 100,000 asthma attacks in children and young adults and avoiding 1,800 — 4,270 premature deaths and up to 2,100 heart attacks. Michigan residents will benefit from a share of these national health protections.

State Flexibility in Achieving Carbon Pollution Targets

States will have flexibility to meet EPA's target using the energy sources that work best for them and by cutting energy waste. To date, more than 35 states already have renewable energy targets, over 25 states have state-wide programs to cut energy waste, and 10 have adopted market-based greenhouse gas emissions programs. EPA's proposal builds on progress already underway in each state and provides guidelines for states to develop plans to meet their carbon pollution reduction targets. It allows states to work alone to develop plans or to work together with neighboring states to develop multi-state plans, creating thousands of good jobs for Americans who are making our electricity system cleaner and our homes and businesses more energy efficient.

Cutting Carbon Pollution in Michigan

Through the President's leadership, and the initiative of the state of Michigan, local communities, and the private sector, a number of common-sense measures to combat carbon

pollution in Michigan are already in place. In fact, between 2008 and 2011, carbon emissions from the power sector decreased over 10 percent in Michigan. EPA's flexible proposed guidelines for power plants will continue driving cost-effective measures to reduce carbon pollution in Michigan, building off of recent progress:

• *Increased Deployment of Clean Energy*: Since the President took office, we have increased U.S. solar-electricity generation by more than ten-fold and tripled U.S. electricity production from wind power. In Michigan, renewable energy generation from these sources increased by more than 100 percent. Since 2009, the Administration has supported tens of thousands of renewable energy projects throughout the country, including 202 in Michigan, generating enough energy to power more than 100,000 homes. Michigan already has a goal to generate 10 percent of its electricity from renewable energy resources by 2015.

In addition, the Administration has supported construction of the first nuclear reactors in three decades as well as research and development for new small modular nuclear reactors; made an historic investment of more than \$6 billion in clean coal technologies; and worked to streamline permitting of new hydropower as well as the transmission lines that connect clean power to consumers.

• Improved Energy Efficiency: Using less energy to power our homes and businesses is critical to building a clean and secure energy future. President Obama has made essential investments in research and development to advance energy efficiency, and set new standards to make the things we use every day more efficient. Since October 2009, the Department of Energy and the Department of Housing and Urban Development have jointly completed energy upgrades for nearly two million homes across the country, saving many families more than \$400 on their heating and cooling bills in the first year alone, bringing the state of Michigan closer to reaching its goal of cutting retail electricity sales by 1 percent each year, beginning in 2012.

Already, local communities are taking initiative. As part of the President's Better Buildings Challenge, Michigan State University committed to reducing energy intensity 20 percent by 2020 in 20 million square feet of campus buildings. To date, Michigan State University has achieved improved energy performance of 10 percent.

• Increased Utilization of Natural Gas: The U.S. produces more natural gas than ever before – and nearly everyone's energy bill is lower because of it. "In fact, in 2012, total electricity generation from natural gas power plants increased by more than 50% compared to 2008." In Michigan, the average utilization of natural gas combined cycle power plants has increased by more than 170 percent, resulting in over 10 million metric tons of avoided carbon dioxide emissions.